

No.

200500259



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Syngenta Seeds, Inc.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, GARDEN

'Embassy'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this seventeenth day of September, in the year two thousand and seven.*

Attest:

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER <b>Syngenta Seeds, Inc.</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	3. VARIETY NAME <b>Embassy</b>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>600 North Armstrong Place Boise, Idaho 83704</b>		5. TELEPHONE (include area code) <b>(208) 322-7272</b>	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER <b>200500259</b> FILING DATE <b>MAY 20, 2005</b>
		6. FAX (include area code) <b>(208) 327-9319</b>	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <b>Corporation</b>	8. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>DE</b>	9. DATE OF INCORPORATION <b>February 25, 1975</b>	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <b>Charleen Orthel Syngenta Seeds, Inc. 600 N. Armstrong Pl. Boise, ID 83704</b>  <b>Kim Briggs 6338 Highway 20-26 Nampa ID 83687</b>  <b>MAY 6/2/07</b>			FILING AND EXAMINATION FEES: <b>\$ 3,652.00</b> DATE <b>5/20/05</b> CERTIFICATION FEE: <b>\$ 768.00</b> DATE <b>7/17/07</b>
11. TELEPHONE (include area code) <b>(208) 327-7246 465-8522</b>	12. FAX (include area code) <b>(208) 327-9319 467-4539</b>	13. E-MAIL <b>Kim. briggs charleen.orthel@syngenta.com</b>	
14. CROP KIND (Common Name) <b>Bean, Garden</b>	16. FAMILY NAME (Botanical) <b>Fabaceae</b>	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP <b>Phaseolus vulgaris L.</b>	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER <b>Charleen Orthel</b>		SIGNATURE OF OWNER	
NAME (Please print or type) <b>Charleen Orthel</b>		NAME (Please print or type)	
CAPACITY OR TITLE <b>Registration Specialist</b>	DATE <b>05/19/2005</b>	CAPACITY OR TITLE	DATE <b>05/19/2005</b>

(See reverse for instructions and information collection burden statement)

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

**Plant Variety Protection Office**

**Telephone: (301) 504-5518**

**FAX: (301) 504-5291**

**Homepage:** <http://www.ams.usda.gov/science/pvpo/pvpindex.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

## ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See *Regulations and Rules of Practice, Section 97.103*).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

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**22. CONTINUED FROM FRONT** (Please provide a statement as to the limitation and sequence of generations that may be certified.)

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**23. CONTINUED FROM FRONT** (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

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Please see attached

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**24. CONTINUED FROM FRONT** (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

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**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

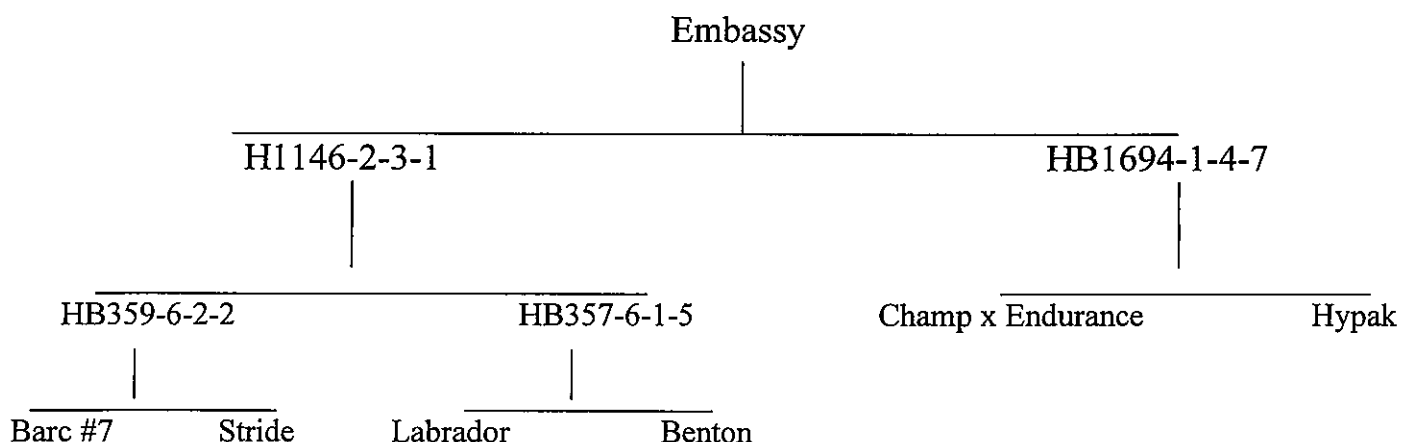
23.

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Ship Date	Lbs.	shp_country	Variety	State	Comment
27-Apr-04	20	Australia	BEAN EMBASSY		Regional Adaptability Trial
03-Jun-04	15	Canada	BEAN EMBASSY		Regional Adaptability Trial
23-Mar-04	10	Guatemala	BEAN EMBASSY		Regional Adaptability Trial
18-Mar-05	60	Mexico	BEAN EMBASSY		Regional Adaptability Trial
20-Feb-04	4321	United States	BEAN EMBASSY	CA	Processing trial
18-May-04	75	South Africa	BEAN EMBASSY		Regional Adaptability Trial

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**Exhibit A**  
**Origin and Breeding History**  
**'Embassy'**



The pedigree trace of 'Embassy' is shown above. 'Embassy' originated from the hand-pollinated cross between the Syngenta Seed, Inc. lines HB1146-2-3-1 and HB1694-1-4-7. HB359-6-2-2 and HB357-6-1-5 are lines from Syngenta Seeds, Inc. Champ is a variety developed by a company acquired by Syngenta Seeds, and Endurance is a variety developed by Syngenta Seeds, Inc. Hypak is a variety developed by Harris Moran. Barc#7 is a rust resistant USDA variety. Stride is a variety developed by a company acquired by Syngenta Seeds. Labrador is a variety developed by Seminis, Inc and Benton is a variety developed by Syngenta Seeds, Inc.

Embassy was a cross made in the fall of 1997. The F1 was bulked, and resulting F2, F3, F4 generations employed the single pod descent method to select for heat tolerance and yield. In the F5 generation a single was selected for traits of long straight pods with dark green pod flesh. Subsequent F6 through F8 generations were bulked and evaluated for purity. The F9 generation was bulk harvested and used supply seed for further increases. 'Embassy' has been uniform and stable for four generations of increases from the original F6 bulk, being free of off-types and variants.

**Exhibit B**  
**Statement of Distinctness**  
**'Embassy'**

'Embassy' is a bush snap bean suitable for processing markets that most closely resembles the variety 'Labrador'. 'Embassy' differs statistically from 'Labrador' in the following traits.

1. 'Embassy' and 'Labrador' are significantly different in plant height. In Idaho, 'Labrador' (43.6 cm) was 10.8 cm greater in plant height than 'Embassy' (32.8 cm). There was 2.6 cm difference in plant height in Minnesota where average height was 46 and 43.4 cm for 'Labrador' and 'Embassy', respectively.
2. Four-sieve pod length was significantly different in varieties 'Embassy' and 'Labrador'. In Nampa, Idaho, 'Labrador' average four-sieve pod length was 13 cm and 'Embassy' was 13.8 cm a 0.8 cm difference. Average four-sieve pod length differed by 0.9 mm in Minnesota, with Labrador measuring 12.5 cm and 'Embassy' 13.4 cm. See Attachment B-2 a, thru f.

All reported values for plant height and four-sieve pod length are based on average measurements.

Data for plant height comparisons were collected in Nampa, Idaho and Stanton, Minnesota during the 2004 growing season. Twenty plants height measurements of each variety were taken at each location. Each plot was comprised of 100 plants.

Four-sieve pod length data was collected from pods harvested in 2004 from each variety of 100 plant plots in Nampa, Idaho and Stanton, Minnesota. Random samples from a four-sieve lot were measured for pod length.

**Exhibit B**  
**Statement of Distinctness**  
**'Embassy'**

Explanation of statistical analysis variables used in the following attachments

PLHTLABID = Plant Height (cm), Labrador, Idaho

PLHTSBID = Plant Height (cm), Embassy, Idaho

PLHTLABMN = Plant Height (cm), Labrador, Minnesota

PLHTSBMN = Plant Height (cm), Embassy, Minnesota

SV4PLLABID = Four-Sieve Pod Length (cm), Labrador, Idaho

SV4PLSBID = Four-Sieve Pod Length (cm), Embassy, Idaho

SV4PLLABMN = Four-Sieve Pod Length (cm), Labrador, Minnesota

SV4PLSBMN = Four-Sieve Pod Length (cm), Embassy, Minnesota

Statistix 8.0

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**Descriptive Statistics**

Variable	N	Mean	SD	Minimum	Maximum
PLHTLABID	20	43.650	4.4281	32.000	49.000
PLHTSBID	20	32.850	4.0429	27.000	45.000

Attachment B-1a  
Plant Height (cm)  
Descriptive Statistics  
'Labrador' vs. 'Embassy'  
Nampa, Idaho  
2004



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One-Way AOV for: PLHTLABID PLHTSBID

Source	DF	SS	MS	F	P
Between	1	1166.40	1166.40	64.9	0.0000
Within	38	683.10	17.98		
Total	39	1849.50			

Grand Mean 38.250 CV 11.08

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	0.15	1	0.6956
Cochran's Q	0.5454		
Largest Var / Smallest Var	1.1996		

Component of variance for between groups	57.4212
Effective cell size	20.0

Variable	Mean
PLHTLABID	43.650
PLHTSBID	32.850
Observations per Mean	20
Standard Error of a Mean	0.9481
Std Error (Diff of 2 Means)	1.3408

Attachment B-1b  
Plant Height (cm)  
AOV  
'Labrador' vs. 'Embassy'  
Nampa, Idaho  
2004

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Statistix 8.0

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**LSD All-Pairwise Comparisons Test**

Variable	Mean	Homogeneous Groups
PLHTLABID	43.650	A
PLHTSBID	32.850	B

Alpha	0.05	Standard Error for Comparison	1.3408
Critical T Value	2.024	Critical Value for Comparison	2.7142

All 2 means are significantly different from one another.

Attachment B-1c  
Plant Height (cm)  
Comparison of Means  
'Labrador' vs. 'Embassy'  
Nampa, Idaho  
2004

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**Descriptive Statistics**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Minimum</b>	<b>Maximum</b>
PLHTLABWI	20	46.050	2.3725	42.000	52.000
PLHTSBWI	20	43.400	4.5352	36.000	50.000

Attachment B-1d  
Plant Height (cm)  
Descriptive Statistics  
'Labrador' vs. 'Embassy'  
Stanton, Minnesota  
2004

Statistix 8.0

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## One-Way AOV for: PLHTLABWI PLHTSBWI

Source	DF	SS	MS	F	P
Between	1	70.225	70.2250	5.36	0.0261
Within	38	497.750	13.0987		
Total	39	567.975			

Grand Mean 44.725 CV 8.09

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	7.28	1	0.0070
Cochran's Q	0.7851		
Largest Var / Smallest Var	3.6540		

Component of variance for between groups	2.85632
Effective cell size	20.0

Variable	Mean
PLHTLABWI	46.050
PLHTSBWI	43.400
Observations per Mean	20
Standard Error of a Mean	0.8093
Std Error (Diff of 2 Means)	1.1445

Attachment B-1e  
 Plant Height (cm)  
 AOV  
 'Labrador' vs. 'Embassy'  
 Stanton, Minnesota  
 2004

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LSD All-Pairwise Comparisons Test

Variable	Mean	Homogeneous Groups
PLHTLABWI	46.050	A
PLHTSBWI	43.400	B

Alpha	0.05	Standard Error for Comparison	1.1445
Critical T Value	2.024	Critical Value for Comparison	2.3169
All 2 means are significantly different from one another.			

Attachment B-1f  
Plant Height (cm)  
Comparison of Means  
'Labrador' vs. 'Embassy'  
Stanton, Minnesota  
2004

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**Descriptive Statistics**

Variable	N	Mean	SD	Minimum	Maximum
SV4PLLABID	20	13.095	0.8841	11.200	14.500
SV4PLSBID	20	13.820	0.4905	13.100	14.700

Attachment B-2a  
Four-Sieve Pod Length (cm)  
Descriptive Statistics  
'Labrador' vs. 'Embassy'  
Nampa, Idaho  
2004

Statistix 8.0

3/30/2005, 11:43:38 AM

## One-Way AOV for: SV4PLLABID SV4PLSBID

Source	DF	SS	MS	F	P
Between	1	5.2563	5.25625	10.3	0.0027
Within	38	19.4215	0.51109		
Total	39	24.6778			

Grand Mean 13.457 CV 5.31

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	6.08	1	0.0137
Cochran's Q	0.7646		
Largest Var / Smallest Var	3.2479		

Component of variance for between groups	0.23726
Effective cell size	20.0

Variable	Mean
SV4PLLABID	13.095
SV4PLSBID	13.820
Observations per Mean	20
Standard Error of a Mean	0.1599
Std Error (Diff of 2 Means)	0.2261

Attachment B-2b  
 Four-Sieve Pod Length (cm)  
 AOV  
 'Labrador' vs. 'Embassy'  
 Nampa, Idaho  
 2004

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## LSD All-Pairwise Comparisons Test

Variable	Mean	Homogeneous Groups
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SV4PLSBID	13.820	A
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SV4PLLABID	13.095	B
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Alpha	0.05	Standard Error for Comparison	0.2261
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Critical T Value	2.024	Critical Value for Comparison	0.4577
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All 2 means are significantly different from one another.

Attachment B-2c  
Four-Sieve Pod Length (cm)  
Comparison of Means  
'Labrador' vs. 'Embassy'  
Nampa, Idaho  
2004



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**Descriptive Statistics**

Variable	N	Mean	SD	Minimum	Maximum
SV4PLLABMN	20	12.570	1.1904	9.7000	14.600
SV4PLSBMN	20	13.405	0.8924	11.800	15.500

Attachment B-2d  
Four-Sieve Pod Length (cm)  
Descriptive Statistics  
'Labrador' vs. 'Embassy'  
Stanton, Minnesota  
2004

10

200500259

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One-Way AOV for: SV4PLLABMN SV4PLSBMN

Source	DF	SS	MS	F	P
Between	1	6.9723	6.97225	6.30	0.0164
Within	38	42.0515	1.10662		
Total	39	49.0238			

Grand Mean 12.988 CV 8.10

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	1.52	1	0.2182
Cochran's Q	0.6402		
Largest Var / Smallest Var	1.7794		

Component of variance for between groups	0.29328
Effective cell size	20.0

Variable	Mean
SV4PLLABMN	12.570
SV4PLSBMN	13.405
Observations per Mean	20
Standard Error of a Mean	0.2352
Std Error (Diff of 2 Means)	0.3327

Attachment B-2e  
Four-Sieve Pod Length (cm)  
AOV  
'Labrador' vs. 'Embassy'  
Stanton, Minnesota  
2004

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**LSD All-Pairwise Comparisons Test**

Variable	Mean	Homogeneous Groups
SV4PLSBMN	13.405	A
SV4PLLABMN	12.570	B

Alpha	0.05	Standard Error for Comparison	0.3327
Critical T Value	2.024	Critical Value for Comparison	0.6734
All 2 means are significantly different from one another.			

Attachment B-2f  
Four-Sieve Pod Length (cm)  
Comparison of Means  
'Labrador' vs. 'Embassy'  
Stanton, Minnesota  
2004

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U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY  
Garden Bean (*Phaseolus vulgaris* L.)

NAME OF APPLICANT (S) <i>Syngenta Seeds, Inc.</i>	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME <i>Embassy</i>
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)		PVP NUMBER <b>200500259</b>

## PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g.,    or   ) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties centered in the same trial. Measured data should be for SPACED PLANTS. Ranges should also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: \_\_\_\_\_

Please answer all questions for your variety; lack of response may delay progress of your application.

## 1. TYPE:

1 = Garden      2 = Flageolet      3 = Romano

## 2. MARKET MATURITY:

Days to Edible Pods

Heat Units to Edible Pods

Number of Days Earlier Than

Same As

Number of Days Later Than

*not tested*

Comparison Variety

*none*

## Comparison Varieties

- 1 = Tender crop      2 = Kentucky Wonder  
3 = Gold rush      4 = Slenderette  
5 = Gitana      6 = Provider  
7 = Bush Blue Lake 290  
8 = Other (Specify Below) *Labrador*

## 3. PLANT:

cm Spacing Between Plants in a Row

Habit

- 1 = Determinate  
2 = Indeterminate, Erect Stem and Branches  
3 = Indeterminate with Weak and Prostrate Stem and Branches  
4 = Indeterminate Climbing Habit with Weak, Long, and Twisted Stem and Branches

cm Height

cm Shorter Than

Comparison Variety

Same Height As

cm Taller Than

Use Comparison Varieties from Section 2

200500259

ExNbk C (Garden Bean)

## 3. PLANT: (continued)

25

cm Spread

12

cm Narrower Than

7

Same Width As

8

Comparison Variety

1

cm Wider Than

-

NONE

Use Comparison Varieties from Section 2

3

Pod Position

1 = Low 2 = High 3 = Scattered

4

Bush Form (Illustrated Below)



1 = Spherical Bush Form



2 = Stem Bush Form



3 = Wide Bush Form



4 = High Bush Form

5 = Other (Specify) \_\_\_\_\_

## 4. LEAVES:

1

Surface:

1 = Dull

2 = Glossy

3 = Indeterminate

1

Size:

1 = Small (Gitana)

2 = Medium

3 = Large (Tender Crop)

3

Color:

1 = Light Green (as Light or Lighter than Gold Rush)

2 = Medium Green

3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

## 5. ANTHOCYANIN PIGMENT:

1 = Absent

2 = Present

1

Flowers

1

Stems

1

Pods

1

Seeds

1

Leaves

1

Petioles

1

Peduncles

1

Nodes

## 6. FLOWER COLOR AND DAYS TO BLOOM:

2

Color of Standard

1

Color of Wings

2

Color of Keel

40

Days to 50% Bloom

## Flower Color Choices

1 = White 2 = Cream

3 = Pink 4 = Lilac

5 = Purple 6 = Blue

7 = Other (Specify) \_\_\_\_\_

## 7. PODS (Edible Maturity):

3

Exterior Color  
(Fresh)

1 = Light Green (as Light or Lighter than Provider)

2 = Medium Green

3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

4 = Yellow (Gold Rush)

5 = Green-red Variegated (Horticultural)

6 = Other (Specify) \_\_\_\_\_

2

Processed Pods (Exterior Color)

1 = Light (Tender Crop)

2 = Dark (Bush Blue Lake 290)

2

Dry Pod Color

1 = Buckskin (Sprite)

2 = Green, Persistent Chlorophyll (Hystyle)

20

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Exhibit C (Garden Bean)

## 7. PODS (continued):

**3** Cross Section Pod Shape: 1 = Flat 2 = Heart (Pear) 3 = Round 4 = Figure Eight  
(Middle of the Pod)



**2** Crease Back 1 = Present 2 = Absent

**2** Pubescence 1 = None (Slenderette) 2 = Sparse 3 = Considerable (Provider or Sprite)

**2** Constriction (Interocular Cavitation) 1 = None 2 = Slight 3 = Deep

**16** mm Spur Length

**1** Fiber 1 = None (Bush Blue Lake 290) 2 = Sparse 3 = Considerable (Sprite)

**5** Number of Seeds per Pod

**2** Suture String 1 = Present 2 = Absent

**2** Seed Development 1 = Slow (Bush Blue Lake 290) 2 = Medium 3 = Fast (Provider)

**1** Machine Harvest 1 = Adapted 2 = Not Adapted

Percent sieve size distribution at optimum maturity for not-flat pods

105 mm sd size

4.76 to 5.76mm	5.76 to 7.34mm	7.34 to 8.34mm	8.34 to 9.53mm	9.53 to 10.72 mm	>10.72mm
2 %	2 %	3 %	35 %	52 %	6 %

3 Sieve

cm Length

mm width

Total mm Thickness

4 Sieve

cm Length

mm width

Total mm Thickness

5 Sieve

cm Length

mm width

Total mm Thickness

6 Sieve

cm Length

mm width

Total mm Thickness

## 8. SEED COLOR:

**3** Seed Coat Luster: 1 = Shiny 2 = Dull 3 = Semi-Shiny 4 = Variable

**1** Seed Coat: 1 = Monochrome 2 = Polychrome

**11** Primary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple  
9 = Blue 10 = Black 11 = Other Green

**1** Secondary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple  
9 = Blue 10 = Black 11 = Other

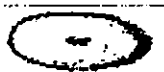
**1** Seed Coat Pattern: 1 = Solid 1 = Splashed 3 = Mottled 4 = Striped 5 = Flecked 6 = Dotted

**2** Hilum Ring 1 = Absent 2 = Present

**03** Hilum Ring Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple  
9 = Blue 10 = Black 11 = Other

## 9. SEED SHAPE AND SIZE:

**2** Hilum View



1 = Elliptical



2 = Oval



3 = Round

**2** Cross Section 1 = Elliptical 2 = Oval 3 = Cordate 4 = Round

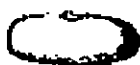
200500259

Exhibit C (Garden Bean)

## 9. SEED SHAPE AND SIZE: (continued)

3

Side View



1 = Oval to Oblong



2 = Round



3 = Reniform

36

gm/100 Seeds

04

gm/100 Seeds Lighter Than

1

gm/100 Seeds Same As

0

None

Comparison Variety

06

gm/100 Seeds Heavier Than

5

## 10. DISEASE RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

0

Anthracnose (*Colletotrichum lindemuthianum*)☐

Race Alpha

☐

Race Beta

☐

Race Gamma

☐

Race Delta

☐

Race Epsilon

☐

Race Lambda

☐

Race Kappa

☐

Specify Race \_\_\_\_\_

0

Bean Rust (*Uromyces appendiculatus*)☐

Race 38

☐

Race 39

☐

Race 40

☐

Race 44

☐

Race 45

☐

Race 46

☐

Race 49

☐

Race 50

☐

Race 51

☐

Race 52

☐

Race 54

☐

Race 56

☐

Race 59

☐

Specify Race \_\_\_\_\_

0

Powdery Mildew (*Erysiphe polygoni*)

0

Fusarium Root Rot (*Fusarium solani* f. sp. *phaseoli*)

0

Pythium Root Rot (*Pythium* spp.)

0

Aphanomyces Root Rot (*Aphanomyces euteiches*)

0

Rhizoctonia Root Rot (*Rhizoctonia solani*)

0

Pythium Blight or Aerial Pythium (*Pythium ultimum*)

0

Angular Leaf Spot (*Isariopsis griseola*)

0

Bacterial Wilt (*Corynebacterium flaccumfaciens* subsp. *flaccumfaciens*)

2

Bacterial Brown Spot (*Pseudomonas syringae* pv. *syringae*)

0

Common Bacterial Blight (*Xanthomonas campestris* pv. *phaseoli*)

0

Halo Blight (*Pseudomonas syringae* pv. *phaseolicola*)☐

Race 1

☐

Race 2

0

Clover Yellow Vein Virus (CYVV)

0

Bean Common Mosaic Virus (BCMV)

☐

BV1

☐

NY15

☐

NL2

☐

NL3

☐

NL4

☐

NL8

☐

Florida

☐

Idaho

☐

Mexican

☐

Western

☐

Type .

☒

Other (Specify)

Dominant I gene Resistance to seed transmission

0

Yellow Bean Mosaic Virus (BYMV)

0

Curly Top Virus (BCTV)

0

Other (Specify Disease and Race or Strain)

22

200500259

Exhibit C (Garden Bean)

**11. INSECT RESISTANCE:** 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

- |  |   |
|--|---|
| <input type="checkbox"/> Aphid                 | <input type="checkbox"/> Root Knot Nematode |
| <input type="checkbox"/> Leafhopper            | <input type="checkbox"/> Seed Corn Maggot   |
| <input type="checkbox"/> Lygus                 | <input type="checkbox"/> Thrips             |
| <input type="checkbox"/> Pod Borer             | <input type="checkbox"/> Weevils            |
| <input type="checkbox"/> Other (Specify) _____ |   |

**12. PHYSIOLOGICAL RESISTANCE:** 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

- |  |                                |                                  |
|--|--------------------------------|----------------------------------|
| <input type="checkbox"/> Heat                  | <input type="checkbox"/> Cold  | <input type="checkbox"/> Drought |
| <input type="checkbox"/> Air Pollution         | <input type="checkbox"/> Ozone |                                  |
| <input type="checkbox"/> Other (Specify) _____ |                                |                                  |

**13. COMMENTS:**



**Exhibit E**  
**Statement of the Basis of Ownership**  
**'Embassy'**

Garden Bean Embassy was bred and developed by plant breeders employed by Syngenta Seeds. By agreement between the employee and Syngenta Seeds, all rights to any invention, discovery or development made by the employee while employed by Syngenta Seeds were assigned to Syngenta Seeds, with no rights retained by the employee.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S)  Syngenta Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME  Embassy
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  600 North Armstrong Place Boise, ID 83704	5. TELEPHONE (Include area code)  208-465-8522	6. FAX (Include area code)  208-467-4559
	7. PVPO NUMBER  200500259	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Same as on original application.

Garden Bean, Embassy, was bred and developed by plant breeders employed by Syngenta Seeds. By agreement between the employee and Syngenta Seeds, all rights to any invention, discovery or development made by the employee while employed by Syngenta Seeds were assigned to Syngenta Seeds, with no rights retained by the employee.

**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

EXHIBIT F  
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S) Syngenta Seeds, Inc.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 600 North Armstrong Place Boise, ID 83704 USA	TEMPORARY OR EXPERIMENTAL DESIGNATION
NAME OF OWNER REPRESENTATIVE (S) Kim Briggs	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 6338 Highway 20-26 Nampa, ID 83687	VARIETY NAME Embassy  FOR OFFICIAL USE ONLY PVPO NUMBER

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Kim Briggs  
Signature

02-14-2007  
Date